



DEPARTMENT OF THE NAVY

U.S. NAVAL BASE GUAM
PSC 455 BOX 152
FPO AP 96540-1000

5090
Ser EV/0490
June 6, 2019

L.B. Aguon
State Historic Preservation Officer
Department of Parks and Recreation
490 Chalan Palasyo
Agaña Heights, Guam 96910

Dear Ms. Aguon,

Subject: CONSTRUCTION OF UNDERWATER ELECTROMAGNETIC MEASURING SYSTEM AT
APRA HARBOR, NAVAL BASE GUAM, MARIANAS ISLANDS

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), Navy Base Guam (NBG) requests your review of the proposed project to construct and operate an Underwater Electromagnetic Measuring System (UEMMS) in Outer Apra Harbor, Guam (Enclosures 1 and 2). In accordance with Section 106 of the NHPA, we have reviewed the proposed project scope and determined that it is an undertaking as defined by 36 CFR 800.16 (y).

PROJECT DESCRIPTION

The proposed project is to establish a UEMMS in Outer Apra Harbor to measure the electromagnetic signatures and electric fields of surface ships and submarines (Enclosure 3). The UEMMS would consist of an array of 20 magnetic and electrical field sensors that would be installed underwater within the navigational channel (leading to Inner Apra Harbor). A cable would connect from the sensor array to an existing onshore facility to gather and store measured data. This project would enable NBG to support the calibration process which ensures that ships and submarines are in compliance with electromagnetic signatures limits to perform their existing mission and ongoing military operations.

The sensors would be installed in a single line arranged perpendicular to, and extending approximately 200 feet on either side of, the navigational channel center line. The sensors are 20 feet long and would be encased inside 10-inch diameter fiberglass tubes spaced about 20 feet apart, and buried approximately four feet deep below the existing ocean floor depth at -48 to -55 feet mean low water (MLW) (Enclosure 4). The excavation footprint for the sensor array will encompass a rectangular area approximately 20 feet wide by 400 feet long and 10-12 feet deep (excavation depth of up to -72 feet MLW). Sensor cables from the array will use a "deep water" route to connect to onshore facilities at Polaris Point with a transition vault to be constructed along the shoreline. The sensor cables would then connect

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to data acquisition equipment in the Force Protection Tower (Building 4427) with data cables routed subsurface to the Torpedo Exercise Support (building 4460) for data transfer (see Enclosure 3).

AREA OF POTENTIAL EFFECT

The Area of Potential Effect (APE) includes underwater and terrestrial components. The underwater locations include the site of the sensor array within the navigational channel and the routing of the sensor cable from the array to the onshore facilities at Polaris Point. The APE took into consideration multiple variables that have the potential to affect historic properties including the direct effects from construction, as well as visual and auditory effects.

IDENTIFICATION OF HISTORIC PROPERTIES

Archaeology

There are no known archaeological resources identified either underwater or terrestrially. The onshore route of the data cable is within an area that has been determined to have no potential for archaeological resources (SEARCH 2015). Polaris Point is an artificial land segment constructed of dredged fill material from Apra Harbor during the late 1940s (Helgesson 1964). There is no integrity to these sediments and therefore no possibility of Pre-Contact or WWII sites. Hence, there are no concerns in terms of archaeological resources being present in the vicinity of the terrestrial portion of the project area above or below the ground surface (Enclosure 3).

Built Environment

Equipment used for the UEMMS operation would be installed within Buildings 4427 and 4460. Neither of the facilities or the structures along the route of the cabling are eligible for inclusion on the National Register of Historic Places (Mason Architects 2009).

Underwater Archaeology

Although no known ship wrecks are within the area of the sensor array, or the route of the cabling, a magnetic survey of these areas was conducted to determine if any were present. No large magnetic return signals were observed within 200 feet of the navigation range with most detected features being debris (Ocean Surveys 2009). Although anomalies were located within the area of the sensor array, this is also within the navigational channel, which is dredged when necessary (Enclosure 5).

DETERMINATION OF EFFECT

In consideration of the above information, the Navy has made the determination of "No Historic Properties Affected" for the proposed project. In the unlikely event that any historic items are inadvertently discovered during activities associated with this project, the Standard Operating Procedures contained within the Final

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Integrated Cultural Resources Management Plan, Naval Base Guam, Joint Region Marianas (SEARCH 2015) will be followed as well as provisions of 36 CFR 800.13 Post-Review Discoveries.

We request your review and concurrence with our determination of effect within 30 days of receipt of this letter. We value your support of our efforts in continuing to carry out the United States Department of the Navy's responsibility in regards to the management of cultural resources located in its areas of operation.

Should you have any questions regarding this undertaking, please contact Mr. Lon Bulgrin at (671) 339-2093 or by email at lon.bulgrin@fe.navy.mil, or Mr. Jeffrey Fong at (808) 472-1383 or by email at jeffrey.fong@navy.mil.

Sincerely,



E.E. Moon
Installation Environmental Program
Director
By Direction of the Commanding Officer

Enclosures: 1. UEMMS Project Location Map 1 (Aerial Photo)
2. UEMMS Project Location Map 2 (USGS Map)
3. UEMMS Site Plan
4. UEMMS Plan and Profile for Sensor Array
5. Magnetic Survey Results showing anomaly detection

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REFERENCES

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Island and Polaris Point*. Prepared for Department of the
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2009 *Final Report: Geophysical Survey Proposed Magnetic
Measurement Range, Apra Harbor, Guam. OSI Report No.
08ES086*. Prepared for EG&G Technical Services, Inc. and
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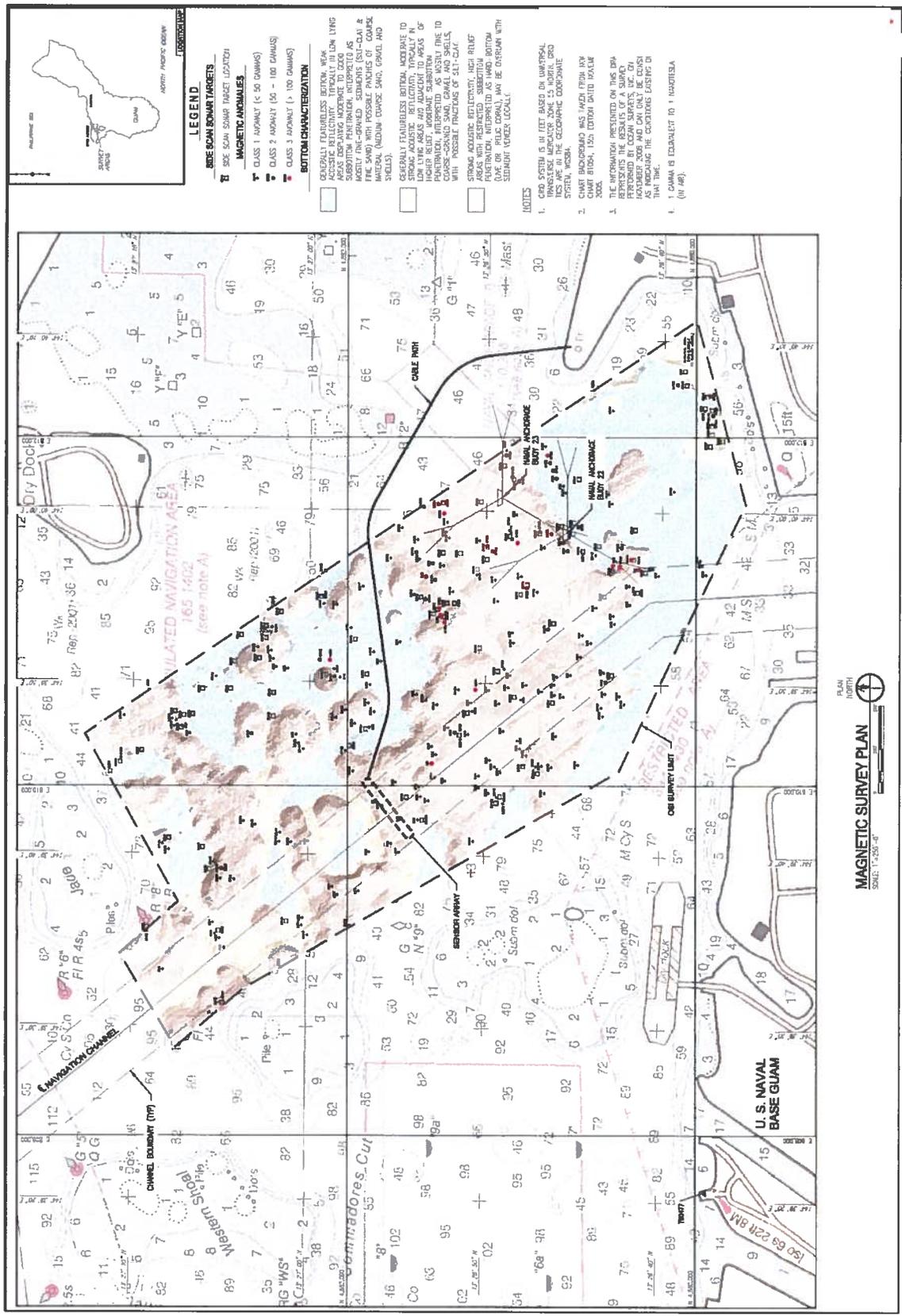


Enclosure 1. UEMMS Project Location Map 1 - Aerial Photo.



LOCATION PLAN
NOT TO SCALE

Enclosure 2. UEMMS Project Location Map 2 - USGS Map.



Enclosure 5. Magnetic Survey Results showing anomaly detection (Ocean Survey 2009).



Department of Parks and Recreation

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In reply refer to:

RC2019-0180

July 5, 2019

E.E. Moon

Installation Environmental Program Director

By Direction of the Commanding Officer

Department of the Navy

U.S. Naval Base Guam

PSC 455, Box 152

FPO AP 96540-1000

Subject:

Section 106 Review of:

Construction of Underwater Electromagnetic Measuring System at Apra

Harbor, Naval Base Guam, Mariana Islands

5090 Ser EV/0490 June 6, 2019

Dear Mr. Moon:

We have reviewed the subject Section 106 undertaking and concur with the Navy's determination of "No Historic Properties Affected." The Navy proposes to construct and operate an Underwater Electromagnetic Measuring System (UEMMS) in outer and inner Apra Harbor Area of Potential Effect (APE), which includes the site of the sensor array within the navigational channel, and the routing of the sensor cable from the array to the onshore facilities at Polaris Point, to Buildings 4427 and 5560.

In the event that historic properties are discovered during activities within outer-inner Apra Harbor and Onshore APE, associated with the subject undertaking, the Standard Operation Procedures of the Final ICRMP, Naval Base Guam, Joint Region Marianas, as well as the 36 CFR Sec.800.13 Post-review discoveries, will be followed.

Should you have any questions or need clarification, please do not hesitate to contact Mr. Jose (Joe) Garrido at 475-6292 or Mr. John Mark Joseph at 475-6339.

Sincerely,

Richard Y. Ybanez
Acting Director

Patrick Q. Lujan
Acting State Historic Preservation Officer

Cc: Lon Bulgrin, CRM, NAVFAC Marianas
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